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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,528	11/06/2003	Jean-Michel Cazenave	0503-1006-1	7365
466	7590	12/29/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			LEWIS, AARON J	
			ART UNIT	PAPER NUMBER
			3743	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/701,528

Applicant(s)

CAZENAVE ET AL.

Examiner

AARON J. LEWIS

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. ('728) in view of Hamlin ('119).

As to claim 1, Gupta et al. disclose a process for the distribution of air enriched in oxygen to the passengers of passenger transport aircraft (col.13, lines 37-44), comprising the steps of: selectively supplying air enriched in oxygen to the passengers so that there is supplied to the passengers a first fraction of air enriched in oxygen from an independent source (24), during a phase of descent (col.11, lines 50-53) of the passenger transport aircraft between a cruising altitude and a re-routing altitude, and producing, in an onboard separator, a second fraction of air enriched in oxygen (22) different from said first fraction, and supplying the second fraction to the passengers at least during a substantially stabilized phase of the flight of the passenger transport aircraft, taking place substantially at the re-routing altitude.

It is noted that one of ordinary skill would recognize an OBOGS as including a separator for the purpose of concentrating oxygen from a plurality of supplied gases; however, inasmuch as Gupta et al. do not expressly disclose a separator and to the extent, if any, that Gupta et al. may lack a separator, resort is had to Hamlin which

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teaches the use of an onboard separator as part of an OBOGS for delivering oxygen enriched breathable gas to passengers (col.4, lines 54-56).

It would have been obvious to modify the OBOGS of Gupta et al. to include the onboard separator of Hamlin because it would have provided a means for concentrating oxygen from a plurality of supplied gases from a variety of sources as taught by Hamlin.

As to claims 2 and 3, Gupta et al. disclose the engagement of OBOGS above 9,000 feet (col.11, lines 11-18). An altitude of 5,500-8,000 meters is approximately 16,500-24,000 feet which is consistent with the activation of OBOGS in Gupta et al. (col.11, lines 24-31).

As to claim 4, Hamlin teaches that OBOGS delivers oxygen content of 55-60% and Gupta et al. disclose the working pressure for OBOGS to be above 10psig, which is within the claimed range.

As to claim 5, Hamlin teaches that the second fraction of air is produced in a molecular sieve concentrator (col.4, lines 54-56).

As to claim 6, Gupta et al. disclose that the independent source (24) contains oxygen at 100%.

As to claims 7 and 8, while Gupta et al. disclose the supply of oxygen from the independent source until depleted (col.11, line 53), one of ordinary skill would recognize the need to stop the supply of pure oxygen from source (24) after reaching an altitude at which passengers no longer need pure oxygen and could suffer oxygen toxicity as a result of being supplied pure oxygen during periods of time when it is not necessary.

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Claims 9-12 are substantially equivalent in scope to claims 1-8 and are included in Gupta et al. in view of Hamlin for the reasons set forth above with respect to claims 1-8.

1. Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. in view of Hamlin as applied to claims 1-11 above, and further in view of Levine ('945).

The difference between Gupta et al. as modified by Hamlin and claim 12 is the provision of an oxygen mask only when the aircraft is experiencing abnormal operating conditions.

Levine, in a process for the distribution of air enriched in oxygen to people on an aircraft during abnormal (e.g. cabin depressurization) operation of the aircraft, teach providing an oxygen mask (figs.4 and 6) only when the aircraft is experiencing abnormal operation conditions for the purpose of providing the passengers with adequate breathable gas during emergency operation (col. 2, lines 13-24).

It would have been obvious to further modify Gupta et al. to provide an oxygen mask to passengers only when the aircraft is experiencing abnormal operating conditions because it would have provided passengers with adequate breathable gas during emergency operations as taught by Levine and because Gupta et al. (col.11, lines 16-23) disclose that passengers on the aircraft may breathe cabin air during normal operation conditions on the aircraft.

Claims 13-18 are substantially equivalent in scope to claims 2-8 and are included in Gupta et al. as modified by Hamlin for the reasons set forth above with respect to claims 2-8.

***Allowable Subject Matter***

2. Claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

3. Applicant's arguments filed 09/23/2004 have been fully considered but they are not persuasive. Applicant's argument regarding continuously supplying vs. selective supplying breathable gas to a passenger(s) is disagreed with because Gupta et al. (col.11, line 51) expressly discloses selectively selecting oxygen from source (24) vs. selecting oxygen from source (22).

Applicant's argument the Gupta et al. lack supplying a first fraction during a phase of descent of the passenger aircraft is disagreed with because Gupta et al. (col.11, line 50) expressly discloses the selection of source (24) during cabin depressurization that occurs during aircraft descent.

Applicant's argument that Gupta et al. lack the provision of a second fraction of air different from the first fraction from an onboard separator at the re-routing altitude is disagreed with because Gupta et al. (col.11, lines 53-55) disclose the re-selection of OBOGS (22) after emergency source (24) has been depleted which would occur during a re-routing altitude.

***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

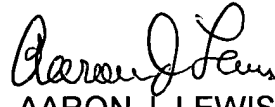
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. LEWIS whose telephone number is (571) 272-4795. The examiner can normally be reached on 9:30AM-6:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY A. BENNETT can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
AARON J. LEWIS  
Primary Examiner  
Art Unit 3743

Aaron J. Lewis  
December 23, 2004